GEORGE, S. & K. MARTENS (1993): Rediscovery of Astenocypris papyracea (Sars 1903) (Crustacea, Ostracoda) in Kerala, India. Zool. J. Linn. Soc. Lond. 109: 27-34.

HARTMAN, G. & H.S. Puri (1974): Summary of neontological and paleontological classification of Ostracoda. *Mitt. Ham. Zool. Mus. Inst.* 70: 7-73.

MULLER, G.W. (1912): Ostracoda. *In*: Schultze, F.E. (ed.)

Das Tierreich, 31, Lieferung. Bellin: Verlag von R.

Friedlander und Sohn. 434 pp.

VICTOR, R. & C.H. FERNANDO (1981): Freshwater Ostracods (Crustacea, Ostracoda) of the subfamily Dolerocypridinae Triebel, 1961 from Southeast Asia. Zool. J. Linn. Soc. Lond. 72: 107-116.

# 26. SOME RARE AND UNCOMMON LEGUMES FROM GARHWAL HIMALAYA

(With three text-figures)

Garhwal Himalaya is well known for its unique vegetation. The area has been explored by Hooker (1876), Duthie (1903, 1906), Osmaston (1927), Babu (1977), Naithani (1984), Polunin and Stainton (1985), Gaur (1987), Gaur et al. (1993), Dangwal and Rawat (1996), Dangwal et al. (1994, 1997). During recent plant explorations in the Garhwal Himalaya, we collected some interesting, rare and little known plants of the Family Faboidae (Papilionaceae).

The present communication gives illustrations of the newly recorded taxa, flowering and fruiting period, habitat, occurrence, approximate elevation range, availability and collector's herbarium number. The plant specimens, after being identified, were matched with authentic specimens from the regional herbaria housed at Botanical Survey of India, Northern Circle (BSD), and Forest Research Institute (DD), Dehra Dun. The voucher specimens are deposited at the Herbarium Department of Botany, H.N.B. Garhwal University (GUH), Srinagar (Garhwal).

Tephrosia candida DC., Prod. 2: 249. 1825; Baker in Hook. f., F.B.I. 2: 111. 1876; Duthie, Fl. Upp. Gang. Plain 1: 144. 1903; Osmaston, For. Fl. Kumaon 154. 1927; Sanjappa, Leg. Ind. 256. 1992. (Fig. 1).

Fl. & Fr.: August-January.

**Distribution**: Srinagar Garhwal, Uttar Pradesh, 580 m above msl.

Remarks: Rare, a limited number of plants occur in dry localities in open fields along with Carrisa opaca, Rubus ellipticus, Mimosa

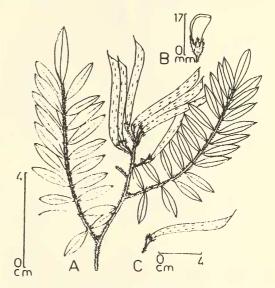


Fig. 1: *Tephrosia candida* DC. A. Fruiting branch; B. Flower; C. Pod.

himalayana, Rhus parviflora and others.

**Specimen examined**: L.R.D., G.U.H. – 12,296.

Notes: Hooker (1876) reported this species from tropical Himalaya to Sikkim and Duthie (1903) from Dehra Dun. However, Sanjappa (1992) mentioned its occurrence in tropical Himalaya to Sikkim, Bihar, Gujarat, Karnataka, Tamil Nadu, West Bengal, Sri Lanka, Nepal, Bhutan, Bangladesh, Burma, and New Zealand. This is a rare new record for Garhwal Himalaya.

Vicia tenera Grah. ex Benth. In Royle, Illust. Bot. Himal. 200. 1835; Baker in Hook. f., F.B.I. 2: 177. 1876; Sanjappa, Leg. Ind. 271. 1992. (Fig. 2).

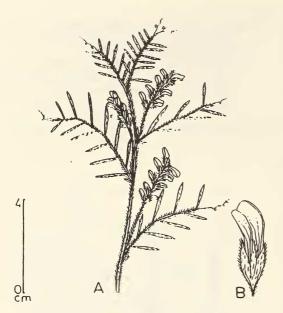


Fig. 2: *Vicia tenera* Grah. A. Flowering branch; B. Flower.

Fl. & Fr.: March-May.

**Distribution**: Matiyali, Pauri Garhwal, 700 m above msl.

Remarks: Uncommon, along roadsides and agricultural fields, in moist places with Melilotus indica, Desmodium microphyllum, D. triflorvm, Stellaria media and grasses.

Specimen examined: L.R.D., G.U.H. – 16.300.

Notes: Hooker (1876) and Sanjappa (1992) reported this species from Western Himalaya (Simla) not stating any locality. This is a rare, new record from Garhwal Himalaya.

Vigna trilobatus (L.) Verdc., Taxon 17: 172. 1968; Naithani, Fl. Chamoli 1: 178. 1984. *Phaseolus trilobus* Ait.; Baker in Hook. f., F.B.I. 2: 201. 1876. (Fig. 3).

Fl. & Fr.: August-October.

**Distribution**: Chelusain, Pauri Garhwal, 1700 m above msl.

Remarks: Uncommon. A limited number of plants were found in dry and shady places on

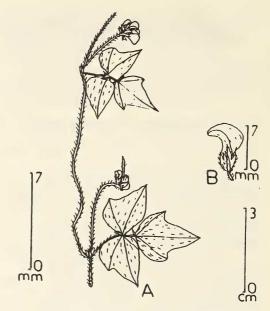


Fig. 3: *Vigna trilobatus* (L.) Verdc. A. Flowering and fruiting branch; B. Flower

slopes, associated with Carissa opaca, Berberis asiatica, Rubus ellipticus, and Rhus parviflora, under Pinus roxburghii shelter.

Notes: Hooker (1876) reported it from Himalaya to Ceylon, Burma and Afghanistan. However, this is a rare collection after a long interval of more than 100 years.

### ACKNOWLEDGEMENTS

We thank the authorities of Botanical Survey of India, Northern Circle (BSD) and Forest Research Institute (DD), Dehra Dun for herbarium facilities.

November 15, 1998

L.R. DANGWAL R.D. GAUR

Department of Botany,
PB. 22, H.N.B. Garhwal University,
Srinagar (Garhwal) 246 174,
Uttar Pradesh,
India.

#### MISCELLANEOUS NOTES

## REFERENCES

- BABU, C.R. (1977): Herbaceous Flora of Dehra Dun.
  Publications and Information Directorate (CSIR),
  New Delhi.
- Dangwal, L.R., D.S. Rawat & R.D. Gaur (1994): Some Rare and Less Known Legumes from Garhwal Himalaya. J. Indian bot. Soc. 73 (III & IV): 311-313.
- Dangwal, L.R., D.S. Rawat & D.C. Nautiyal (1997): Some Rare and Uncommon Legumes from Garhwal Himalaya. J. Econ. Tax. Bot. 21(1): 47-51.
- Dangwal, L.R. & D.S. Rawat (1996): A new species of *Pueraria* DC. (Fabaceae) from Garhwal Himalaya, U.P., India. *J. Bombay nat. Hist. Soc.* 93(3): 703-705.
- DUTHIE, J.F. (1903): Flora of the Upper Gangetic Plain.

  Bishen Singh Mahendra Pal Singh, Dehra Dun (Repr. edn).
- DUTHIE, J.F. (1906): Catalogue of the Plants of Kumaon and of the adjacent portions of Garhwal and Tibet based on the collections made by Strachey and

- Winterbottom during the years 1846-1849 and on the catalogue originally prepared in 1852 by R. Strachey. Bishen Singh Mahendra Pal Singh, Dehra Dun (Repr. edn).
- GAUR, R.D. (1987): A Contribution to the Flora of Srinagar Garhwal. J. Econ. Tax. Bot. 9: 31-63.
- GAUR, R.D., L.R. DANGWAL & D.S. RAWAT (1993): Some Rare and little known Plants of Fabaceae from Garhwal Himalaya. *Indian Journal of Forestry* 17(1): 80-83.
- HOOKER, J.D. (1876): Flora of British India. Vol. II. Bishen Singh Mahendra Pal Singh, Dehra Dun (Repr. edn).
- NAITHANI, B.D. (1984): Flora of Chamoli. Vol. I. Botanical Survey of India. Howrah.
- OSMASTON, A.E. (1927): A Forest Flora of Kumaon. Bishen Singh Mahendra Pal Singh, Dehra Dun (Repr. edn).
- POLUNIN, O. & A. STAINTON (1985): Flowers of the Himalaya. Oxford University Press, New Delhi.
- Sanjappa, M. (1992): Legumes of India. Bishen Singh Mahendra Pal Singh, Dehra Dun.

# 27. REDISCOVERY OF WENDLANDIA ANGUSTIFOLIA WIGHT EX HOOK.F. (RUBIACEAE), FROM TAMIL NADU, A SPECIES PRESUMED EXTINCT

(With eleven text-figures)

Wendlandia angustifolia Wight ex Hook, f., Family Rubiaceae, was first described by Hook, f. (1880) based on Wight's manuscript who collected it from Courtallum. Later, Rangachari collected it from Kannikatti in 1917. Deb and Maiti who revised the genus opine that the species is presumed extinct, and efforts should be made to relocate it in the river beds at low altitudes, to introduce it in botanic gardens to conserve the species. However, the species was rediscovered after a lapse of 81 years, in its known habitat at Inchikuzhi near Kannikatti during an inventory of threatened plants of the Kalakkad Mundanthurai Tiger Reserve (KMTR), Tirunelveli district, Tamil Nadu, in 1998. The species is described and illustrated.

Wendlandia angustifolia Wight ex Hook. f., Fl. Brit. India 3: 40. 1880; Gamble, Fl. Pres. Madras 588. 1921 (repr. ed. 2: 415. 1957); Deb

& Maiti in Nayar & Sastry, Red Data Book Indian Pl. 1: 348, 1987.

Shrub or tree, up to 4 m high. Leaves ternately whorled, linear-lanceolate, attenuate at base, entire at margin, acute at apex, 4-11 x 0.5-1.8 cm, coriaceous; lateral nerves 6-8 pairs; petioles up to 1 cm long; stipules triangularovate, subulate or cuspidate at apex, persistent, 3-5 x 0.8-1 mm. Inflorescence at terminal branches, in panicles; panicles slender, pyramidal, leafy below; flowers densely crowded; bracts ligulate, hastate at base, acuminate at apex, 0.7-0.9 x 0.3-0.5 mm. Calyx tube turbinate, 4 to 6 lobed, c. 0.9 x 1 mm; lobes subulate, subequal, triangular ovate in outline, subulate at apex, c. 0.6 x 0.2 mm. Corolla white, salverform, 4 to 6 lobed, c. 4 x 1.2 mm; lobes orbicular, obtuse or slightly notched at apex, c. 1.1 x 1.1 mm. Stamens 4-6, epipetalous, between corolla lobes